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## AFOSR funds bioelectrics research at Old Dominion U.

by Nahaku McFadden, Air Force Office of Scientific Research

ARLINGTON, Va. — The Air Force Office of Scientific Research presented Old Dominion University's Karl H. Schoenbach a \$5 million, five-year Multidisciplinary Research Initiative (MURI) grant in a ceremony on August 19<sup>th</sup>. The grant will fund his work in bioelectrics, which holds the possibility of a cure for cancer.

Schoenbach, an eminent scholar of electrical and computer engineering at the university, will serve as the grant's principal investigator with Old Dominion University as the lead institution of a seven-university consortium.

Working with Eastern Virginia Medical School's Dr. Stephen Beebe, Schoenbach discovered the ability of high-intensity electric surges for brief periods of time to kill tumor cells, reduce the number of fat cells, and remodel bone and cartilage. With the MURI grant, he will expand his research to explore the effect of electromagnetic fields on proteins and gases. This

research will help scientists to determine the parameters that promote cell growth and/or prevent the degeneration of diseased or injured cells, tissues and organs. Schoenbach's research also should help the military understand how the use of radiation affects military personnel.

The MURI program supports basic science and engineering research of critical importance to national defense. The program is focused on multidisciplinary research efforts that intersect more than one traditional science and engineering discipline. By supporting multidisciplinary teams, the program is complementary to other DoD programs that support university research through single-investigator awards.

"We owe a lot to the Air Force Office of Scientific Research," said Schoenbach. "They are the main agency that has helped us get to where we are today." @